

'Last of the Kodak': Andrei Tarkovsky's Struggle with Colour.

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Abstract

In interviews and writings throughout his career, Andrei Tarkovsky repeatedly returned to the theme of cinematic colour. He referred to it in order to repudiate it: colour film was 'monstrous' and 'false', an artistic 'blind alley'. Despite his objections, Tarkovsky also repeatedly struggled with the Soviet bureaucracy to secure the use of Eastman Kodak colour negatives. Having secured the use of colour, he then minimised its impact in his films through a combination of desaturated production design and laboratory techniques, and counterbalanced its presence with repeated transitions between colour and black-and-white sequences. This essay explores the contradictions in Tarkovsky's response to colour. It roots his work in the stagnation-era political economy of the Soviet Union, before moving on to an exploration of the ways in which his chromatic ambivalence manifested itself in the aesthetics of his films. The essay concludes by suggesting a final contradiction, namely that Tarkovsky's chromatic conservatism anticipated the colour aesthetics of digital cinema.

Introduction

For many film-makers, cinema's transition from black-and-white to colour was as much a problem as an opportunity. How to respond to the pervasive presence of colour within the frame? How to put it to use? The prospect of working in colour often required a wholesale overhaul of personal styles developed through and geared towards making black-and-white films. For many directors, such an overhaul was a protracted and painful process. Ingmar Bergman made *För att inte tala om alla dessa kvinnor / Now About These Women* (Ingmar Bergman, 1964) in colour before reverting to black-and-white for another five years. When at last he returned to colour, in *En Passion / A Passion* (Ingmar Bergman, 1970), he developed a stomach ulcer and his relations with director of photography Sven Nykvist turned bilious (Björkman et al 1973: 261). Like Bergman, many directors – especially art cinema directors, whose aesthetic choices were generally less constrained than those of their Hollywood contemporaries – moved to colour incrementally. Throughout the 1960s, directors including Jean-Luc Godard, Nagisa Oshima, and Federico Fellini chose whether to use black-and-white or colour on a film-by-film basis, alternating between the two formats for several years before finally (and often reluctantly) leaving black-and-white in the past.

Andrei Tarkovsky's transition to colour was especially protracted. It lasted the length of his career. His first short film, *Katok i skripka / The Steamroller and the Violin* (Andrei Tarkovsky, 1960), was colour; his first feature film, *Ivanovo detstvo*

I Ivan's Childhood (Andrei Tarkovsky, 1962), was black-and-white. His subsequent six feature films all mixed black-and-white and colour sequences. In this essay, I interrogate Tarkovsky's response to cinema's move to colour. I begin by anchoring it in the stagnation-era economics of the Soviet Union. I then broaden my analysis to include Tarkovsky's writings and films, highlighting some of the contradictions in his attitude towards colour and exploring how he put his ambivalence to work in the aesthetics of his films. I conclude by suggesting a final contradiction: namely that, as a result of his chromatic ambivalence, Tarkovsky's films can be seen to have anticipated some of the most significant developments in recent digital colour aesthetics.

Tarkovsky's Struggle for Colour: the Soviet Bureaucracy

All of Andrei Tarkovsky's Soviet films were produced under the aegis of Goskino, the administrative superstructure in charge of all aspects of Soviet cinema including production, national and international distribution, foreign film imports and even film criticism.¹ In a political structure where conformity was the *sine qua non* of success, the bottom line was not money but ideology. If a film failed to make a profit, only the state bank lost out; if a film was criticised on ideological grounds, the reputation of everyone involved in its production and distribution was tarnished. The priorities of Gyorgy Yermash, chairman of Goskino (1972-1986), are eloquently summarised in the following entry in Tarkovsky's diary, written after Yermash's refusal to take *Zerkalo / Mirror* (Andrei Tarkovsky, 1975) to Cannes: '*Mirror* could bring in foreign currency – but that is of no interest to Yermash. All he cares about is having his arse in a comfortable chair, and to hell with the interests of the nation!' (Tarkovsky 1994: 107). It is a typically Soviet irony that it should be left to one of the most uncompromising art film directors of his generation to voice such simple economic truths.²

As a result of Goskino's politicised monopoly, whether a film was made in black-and-white or colour was more dependent on the availability of resources than the anticipation of revenues. For a number of reasons, the logistics of supply favoured black-and-white for much of the 1970s. Perhaps the most important factor was the limited availability of good quality colour film stock. Before World War II, the only commercially established colour film processes were Technicolor in the United States and Agfacolor in Germany. Attempts at colour in other countries occasionally achieved a degree of success (as in the case of Dufaycolor and Gasparcolor in Great Britain in the late 1930s), but they lagged behind technologically. Before the war, the Soviet Union lagged especially far behind, having only reached the two colour additive stage of film's technological evolution (Leyda 1960: 338). After the defeat of Germany, Afga's patents became a spoil of war. As a result, from the late 1940s onwards, the manufacture of colour film stocks derived from Agfacolor was pursued in a number of countries – by Fuji in Japan, Ferranio in Italy, and Gevaert in Belgium (Salt 1992: 241). Agfacolor was not quite the equal of Technicolor in the range of colour

values that it could reproduce and in its ability to achieve a ‘firm black’, but over time most of the Agfacolor derivatives managed to improve on the original wartime film’s specifications (Andrew 1980: 67). The only one that did not was the Soviet off-shoot, Sovcolor. Not only were its colour values relatively limited in range, but they also often changed from one batch of raw stock to another, leading to frequent continuity problems.

In response, Goskino began to import a limited amount of Eastman Kodak negative. Bought with western currency through European intermediaries, it was strictly rationed and highly prized (Tarkovskaya 1990). The choice of which projects were allocated imported stock was inevitably political. Kodak was a mark of favour, reserved for Goskino’s preferred projects. The films that used it were most often those granted ‘highest category’ and ‘first category’ status, flagship films including *Tretya molodost / Nights of Farewell* (Jean Dréville & Isaak Menaker, 1966) and *Voyna i mir / War and Peace* (Sergei Bondarchuk, 1968).³ Less privileged directors had two options: black-and-white or Sovcolor. By the early 1970s, Sovcolor was the preferred choice. However, those who wished to continue using black-and-white were not only allowed to indulge this preference but actively encouraged to do so. Most silver ore mined in the Soviet Union was used for military projects, so Goskino was faced with limited raw materials with which to manufacture colour stock (Golovskoy 1986: 47). As a result, even Sovcolor was scarce.⁴ Encouraged by Goskino’s chromatic anxiety, numerous Soviet directors predisposed towards black-and-white (including Alexei German, Otar Iosseliani and Larisa Shepitko) continued making black-and-white films for much of the 1970s.

Tarkovsky’s response to the limited availability of colour was to get hold of as much Eastman Kodak as he could. Only once, in *Andrey Rublyov / Andrei Rublev* (Andrei Tarkovsky, 1969), a fictional biography of the eponymous Russian icon painter, did Tarkovsky choose *not* to use as much imported colour as possible (Johnson & Petrie 1994: 188). His choice could be seen to suggest an instinctive preference for black-and-white, yet it could just as easily be seen as the product of a national industry whose aesthetic default was still black-and-white. Whatever the reason, it is notable that even as early as *Andrei Rublev*, Tarkovsky was already unable to resist the lure of colour entirely. In the last few minutes of the film, black-and-white gives way to a montage of close-up colour tracking shots across a fresco painted by Rublev. Black-and-white represents the reality of Rublev’s life apart from his painting – nowhere in the film is there a single shot of him practicing his art. In its transition to colour, the film moves out of time and beyond the confines of Rublev’s life, into the eternal diegesis of the artwork itself. By contrast, the transition occurring at the same time across all national cinemas involved a contrary movement: colour moved from being perceived as an artful addition to photographic reality to being perceived as the standard of photographic verisimilitude. In acknowledgement of this change, in *Solyaris / Solaris* (Andrei Tarkovsky, 1972), Tarkovsky effected his own transition to colour. Having made this choice, from *Solaris* onwards he attempted to obtain

imported colour stock for each of his Soviet films. The fact that he obtained it for *Solaris* is perhaps not altogether surprising. It was his only film to be granted a highest category classification (Johnson & Petrie 1994: 10-11). One might speculate that, in the light of the contemporaneous obsession with space exploration, Goskino saw in *Solaris* the potential for a high-profile Soviet contribution to a popular genre. More surprising, considering Tarkovsky's existence on the fringes of ideological acceptability, is the fact that he also succeeded in securing Kodak stock for his two subsequent productions: *Zerkalo / Mirror* (Andrei Tarkovsky, 1975) and *Stalker* (Andrei Tarkovsky, 1979). Though the apparatchiks at Goskino made their achromatic preferences clear ('Comrade Tarkovsky, please use black-and-white!'), Tarkovsky was somehow able to negotiate highest category film stock for his lower category films (Tarkovskaya 1990).

Unfortunately, even when a film was granted imported stock, the amount allocated was often inadequate. Part-way through filming *Solaris*, the Kodak ran out (Tarkovsky 1994: 39).⁵ Such shortfalls were routine at the time, and the most common solution was to mix Kodak and Sovcolor. Tarkovsky's response was more unusual. He initially decided to film the remaining scenes in black-and-white (Tarkovsky 1994: 42).⁶ In the event, some of the scenes towards the end of the project's shooting schedule were indeed filmed in black-and-white, but some were filmed in colour.⁷ Was Tarkovsky able to negotiate more Kodak? It is impossible to be sure. However, what the available evidence does make apparent is the fact that the inclusion of black-and-white sequences in *Solaris* was at least partially dependent on supply-side economics.

Supply-side economics played an equally important role in Tarkovsky's next film. In *Mirror*, Tarkovsky was again faced with the problem of inadequate colour stock, as highlighted in the following diary entry:

On Monday 9th, I went to see Pavlyonok. He's an unpleasant, coarse, *louche* character. He was bawling at Erica M. and Karayev and trying to drive a wedge between them. He and Yermash (or rather, Yermash) had been given a direction. The result, we heard yesterday, is that we are being given both money – 622,000 roubles – and 7,500 metres of Kodak film. That means up to three takes. We shall have to get the other 3,000 metres x 4 from Konoplyov (Tarkovsky 1994: 77).

Tarkovsky's terse writing style, combined with his casual insider's references to the Soviet film industry often make his diaries difficult to decipher. Who are all these people? What role does each of them play? What is the significance of the parenthesis (it seems to suggest a discrepancy between the official and actual responsibilities of Boris Pavlyonok, Deputy Chairman of Goskino [1973-85])? Despite these uncertainties, the above entry provides a crucial piece of information. It suggests that the ratio of Kodak to 'other' film stock available for the production was about 2.5:1. Given a final running time of 104 minutes, and

assuming an editing strategy in which the initial ratio of Kodak to ‘other’ stock was maintained, the final film should comprise about 74 minutes of Kodak and 30 minutes of ‘other’ stock. In fact, 71 minutes of *Mirror* are in colour and 33 minutes are in black-and-white. This startlingly close correlation strongly suggests that the ‘other’ stock that Tarkovsky used was black-and-white.⁸⁹ In other words, as in *Solaris*, the extent to which Tarkovsky mixed black-and-white and colour was closely related to the simple logistical question of what film stock was available.

In *Stalker*, Tarkovsky again secured the use of Kodak, but this time he was given a poisoned chalice. Something went badly wrong when the stock was processed.¹⁰ Accounts of what precisely happened at the Mosfilm laboratories and why, and of precisely how much footage was destroyed, differ.¹¹ Regardless of the details, the problem was serious enough to halt production.¹² Amazingly, Tarkovsky was able to resurrect the project and start filming the following year with a new script, a new cinematographer, and a new art director (Johnson & Petrie 1994: 138). By this time, however, ‘the last of the Kodak’ was exhausted and no more was forthcoming (Tarkovsky 1994: 146). One might imagine that at this point Tarkovsky would have reshotted the film entirely in black-and-white, as Goskino wanted him to, or entirely in Sovcolor (Tarkovskaya 1990). In fact, even though he was no longer faced with the dilemma of how to make optimal use of a limited supply of Kodak, he *again* chose to mix colour and black-and-white. In the absence of an obvious economic motivation for this mixture, one must conclude that the choice was made for reasons internal to the film. In other words, in *Stalker* Tarkovsky used black-and-white not because he had to but because he wanted to.

The conclusion that the above observations seem to point to is that Tarkovsky initially mixed black-and-white and colour for reasons that were primarily economic and then, appreciative of the result, incorporated this mixture into his aesthetic *modus operandi*, even after the economic motivation receded. Further evidence to suggest this transformation of pragmatic necessity into personal aesthetic can be seen in his last two films, *Nostalghia / Nostalgia* (Andrei Tarkovsky, 1983) and *Offret / The Sacrifice* (Andrei Tarkovsky, 1986). *Nostalgia* was made in Italy and *The Sacrifice* was made in Sweden. Both were high profile co-productions and had more than adequate budgets. Yet both films again include sections filmed in black-and-white. The mixture of black-and-white and colour was by the 1980s a sufficiently important element of Tarkovsky’s aesthetic philosophy to merit discussion in his elliptical artistic manifesto, *Sculpting in Time*. Completed in 1983, the book can be read as the culmination of twenty five years of reflection on the subject of cinema. In it, Tarkovsky writes that ‘the effect of colour should be neutralised by alternating colour and monochrome sequences, so that the impression made by the complete spectrum is spaced out, toned down’ (Tarkovsky 1986: 138). Thus, it appears, praxis was transformed into theory.

Tarkovsky's Struggle against Colour: theory and praxis

The conclusion that Tarkovsky's mixture of black-and-white and colour reflects a transformation of pragmatic necessity into personal aesthetic is an appealing one, yet it is altogether too simple.¹³ The linear development that it implies can be instantly contradicted by citing the following comment made by Tarkovsky in a 1966 interview, *prior* to his apparently enforced mixture of black-and-white and colour:

On the screen colour imposes itself on you, whereas in real life that only happens at odd moments, so it's not right for the audience to be constantly aware of colour... In real life the line that separates unawareness of colour from the moment when you start to notice it is quite imperceptible. Our unbroken, evenly paced flow of attention will suddenly be concentrated on some specific detail. A similar effect can be achieved in a film when coloured shots are inserted into black-and-white (Tarkovsky 1994: 356).¹⁴

My intention in drawing attention to this interview is not to contradict my argument that in the early and mid-1970s economics played an influential role in Tarkovsky's use of black-and-white and colour. Nor is it to suggest an inverted causality between praxis and theory, i.e. to suggest that he used Goskino's supply shortages as a pretext for implementing previously formulated theories about black-and-white and colour. Rather, my intention in performing this small *volte face* is to highlight the fact that Tarkovsky's attitude towards colour was inherently contradictory. The contradictions are not apparent if one looks only at his bureaucratic struggles, at his interviews and writings, or at his films. They only emerge fully when one looks at all these elements together. For example, there is a conspicuous contradiction between Tarkovsky's efforts to secure colour and his pronouncements on colour in writings and interviews. Tarkovsky regularly discussed cinematic colour throughout his life. On almost every occasion, he referenced it in order to disparage it. In the same 1966 interview as I quoted above, he opined: 'At the moment, I don't think colour film is anything more than a commercial gimmick. I don't know a single film that uses colour well' (Tarkovsky 1994: 356). Over fifteen years later, in an interview following the release of *Nostalgia*, he voiced similar scepticism: 'The cinema is going through a bad period in terms of aesthetics. Filming in colour is regarded as getting as close as possible to reality. But I look on colour as a blind alley' (Mitchell 1982-3: 56). Tarkovsky's voiced disdain for colour reached its most extreme in *Sculpting in Time*, in which he asked: 'Why is it, when all that the camera is doing is recording real life on film, that a coloured shot should seem so unbelievably, monstrously false?' (Tarkovsky 1986: 138).¹⁵ I discuss his answer to this question in the following section.

A further contradiction can be seen to exist between Tarkovsky's efforts to secure colour and the way he used it in his films. Having struggled for colour, he went to extreme lengths to limit its impact. Of all his feature films, only *Solaris*

features frequent appearances of saturated, primary colour. The film begins in the deep green of the countryside, at the family *dacha* of astronaut Kris Kelvin (Donatas Banionis). The natural green is complemented by characters wearing blue, pink, and yellow items of clothing. The interior of the *dacha* is painted a deep blue, while on the veranda there stands a yellow wicker table on which lie red fruit. A variety of hues is also apparent in later scenes on the Solaris space station. Its interiors include a yellow landing bay, corridors lined with red instrumentation panels, and a library with green walls. Within each location, there are additional complementary fragments of colour – for example, Kelvin's white bedroom includes blue bedsheets, a green bonsai tree, and a red closet interior visible through a small circular window. In Tarkovsky's subsequent films, multiple colours rarely co-exist in a single frame. Saturated colours are restricted to individual details. For example, one of the few prominent colours in *Mirror* is the red hair of a girl from the narrator's childhood. The red of her hair is prominent because of the lack of surrounding colour; she walks through a snow-covered forest that is almost pure black and white. Against a colourless background, colour provides the salient detail by which the narrator is able to remember her.

From *Mirror* onwards, the chromatic norm of Tarkovsky's films was that of desaturation. It was a norm that he often went to great lengths to maintain. Assistant Director Maria Chugunova recounts the following result of an unanticipated natural eruption of colour:

On *Stalker* I plucked out all the tiny yellow flowers which were in the camera view. Entire huge meadow — it was full of yellow flowers — and I tore it all out. The rest of the crew helped. Not a tiniest flower remained. Even though it was a very wide shot. Next year when we were shooting the second version, there were no more yellow flowers, we had done a really god job on those; but the blue ones grew instead. We plucked out these as well.¹⁶

The film's lack of all natural colour except shades of green is complemented by its production and costume design. In contrast to the characters in *Solaris*, the three main characters in *Stalker* wear neutral colours: black, brown, beige, and white. These colours are typical of a production and costume design that from *Mirror* onwards was dominated by neutral colours, i.e. colours that did not draw attention to themselves. In *Nostalgia* and *The Sacrifice*, colour was additionally suppressed chemically, reduced by approximately sixty percent through laboratory processing.¹⁷ The extremity of Tarkovsky's chromatic regime can be observed in *A Film By Andrei Tarkovsky* (Michał Leszczyłowski, 1988), a documentary about the production of *The Sacrifice*. An inoffensive burgundy sofa is rejected, walls are painted grey, a tree is moved because its flowers are not white. Once filming is complete, Tarkovsky sits in pyjamas in what may have been his deathbed and tells director of photography Sven Nykvist that he wants less colour.

Is there a kernel of consistency among these contradictions? I believe there is. I wish to suggest that Tarkovsky's opposition was not to colour *per se* but to the way in which it tended to irrupt into films in a panchromatic chaos of verisimilitude. I wish also to suggest that Tarkovsky's movements between black-and-white and colour as well as his use of desaturation can be seen as attempts to mitigate this irruption of verisimilitude. In response to his question of why a coloured shot should seem so 'unbelievably, monstrously false', Tarkovsky suggested the following: 'The explanation must surely be that colour, reproduced mechanically, lacks the touch of the artist's hand; in this area he loses his organising function, and has no means of selecting what he wants' (Tarkovsky 1986: 138). The problem with the flowers in *Stalker* was not the colour itself – at other times in the film, there are vivid close-ups of yellow flames – but the fact that it had not been chosen by him. For Tarkovsky, colour needed to be expressive (of the artist's personal aesthetic) rather than descriptive (of the chromatic chaos of the world). Removing colour through the use of black-and-white stock and desaturation was a means of reducing the number of external chromatic variables within a film and making the frame more amenable to the artist's organising function. In addition, by establishing a chromatic norm in which colour was absent, Tarkovsky became able precisely to control the occasions and the manner in which colours were allowed into his films. In this way, his goal of modulating 'unawareness of colour' with a sudden concentration of attention on 'some specific detail' was furthered (Tarkovsky 1994: 356).

Underlying these explicit intentions, there was also an implicit agenda at work. Just as Tarkovsky regarded himself as a visionary artist, he also regarded cinema as 'a great and lofty art form' (Golovskoy 1986: 120). Connections between cinema and art history are made in all of his films. In *Andrei Rublev*, the protagonist is a painter. In *Ivan's Childhood*, *Solaris*, *Mirror*, *Nostalgia*, and *The Sacrifice*, art enters the diegesis in the form of reproductions of paintings on the walls of rooms and of artists' monographs, through which characters regularly leaf. On occasion, even the *mis-en-scène* references a famous painting. For example, in *Solaris*, a flashback to Kelvin's childhood overtly mimics Pieter Breugel the Elder's *Hunters in the Snow* (1565). The subtext of all these references is clear: cinema exists in direct continuity with painting and can achieve similar lofty artistic heights. In order to demonstrate that cinema was the true "seventh art", Tarkovsky required the same degree of control over his techniques that a painter did. Colour needed to be applied, not 'reproduced mechanically' (Tarkovsky 1986: 138). In short, Tarkovsky used colour as a means of redirecting the commercially-driven movement of cinema towards verisimilitude (and so away from art) back towards art. It was a goal that he stuck to with single-minded consistency throughout his career.

Tarkovsky's Struggle towards Colour: chromatic transitions, repeated

Tarkovsky belonged to a generation of directors caught between two aesthetic norms. Like many of his contemporaries, he had an instinctive preference for black-and-white but acknowledged the new aesthetic hegemony of colour. So it is not altogether surprising that he made up his inadequate allocations of Kodak with black-and-white, and continued using it even when it was not economically necessary. In a sequence in *A Film By Andrei Tarkovsky*, Tarkovsky explains to Sven Nykvist that he wants the viewer to be able to see a specific detail in both black-and-white and colour versions. He does not privilege colour over black-and-white or black-and-white over colour, he treats the two formats equally. By extension, it is possible to see Tarkovsky's films as the product of a refusal to accept that black-and-white had been invalidated by the rise of colour. His films are not merely a response to a represented world in transition from black-and-white to colour. They are an aesthetic manifestation of the moment of transition, replayed again and again. Each film is new attempt to renegotiate the inversion of the aesthetic balance of power between colour and black-and-white that occurred in the 1960s. Cinema's transition to colour is repeatedly undone and then redone.

Of equal interest to the fact that black-and-white and colour repeatedly mix in Tarkovsky's films is the question of *how* they mix. Rather than being placed in opposition (black-and-white signifying reality and colour signifying art, or colour signifying the present and black-and-white signifying the past, or colour signifying reality and black-and-white signifying dreams, etc.), the two formats exist in a fluid relationship. Much could be gained from studying their interaction in each of Tarkovsky's films. For reasons of space, I restrict myself to a few examples from *Solaris*. The film begins in colour, on the eve of Kris Kelvin's journey to a space station in orbit around the mysterious planet Solaris. Years previously, an astronaut returned to Earth claiming that the ocean on Solaris had communicated with him by turning his thoughts into material reality. Since then, the space station has become run down. Kelvin's job is to decide whether it should be decommissioned. Before he leaves, he is visited by Berton (Vladislav Dvorzhetzky), the astronaut who experienced the manifestation. The film's first move from colour to black-and-white occurs when Berton plays a tape of the official investigation into his claim. The debrief, in which various government functionaries question Berton, is first seen in the form of a framed black-and-white moving image played on a screen in the living room in Kelvin's family *dacha*. The film then cuts to full frame black-and-white, as the questioning continues. The separation of colour reality and black-and-white representation initially appears quite conventional. But there then occurs a chromatic *mis-en-abyme*. In the videotaped debrief, Berton suggests that his interrogators watch a videotape that he recorded of his manifestation. Everyone turns to look at a screen. A countdown commences. When it reaches zero, the film cuts to a full-screen colour shot of the ocean on Solaris. The colour of the film-within-the-film-within-the-film then cuts straight back to a colour shot of Kelvin's living room, the film's outer layer of reality. Rather than acting as signifiers of temporal or spatial segregation, these movements between black-and-white and colour serve to

collapse space and time. Spatial and temporal separations are emphasised only to be undermined. Subsequent movements between colour and black-and-white follow no narrative logic. Often they are imperceptible. For example, as Berton returns home in a taxi, the film alternates between black-and-white and colour. However, as the colour values in the tunnels through which he passes are muted by darkness, the transitions are not always immediately apparent. Even more subtle is the film's transition from Earth to space. It takes place in a single cut between an exterior shot of Kelvin's family home and a starscape. Though it is also a transition from black-and-white to colour, the stars are white on black, so it is only in the subsequent close-up of Kelvin's eyes that it becomes apparent the film has moved to colour. For a few moments, in the shot of the stars, the film floats between black-and-white and colour.

In the above examples, the visual evidence that there has been a chromatic transition is deferred and the line that separates black-and-white and colour is made indistinct. At other times, the transition serves to create the momentary awareness of colour that Tarkovsky aspired to in his 1966 interview. For example, in a virtuoso cut, the door to the closet in Kelvin's bedroom slides shut and the red interior light, visible through a small circular window, switches off. At the same moment the image becomes black-and-white. Through the window there is now only black; the small circle of red suddenly becomes prominent in its absence. The result of such stylistic sleights of hand is a sense that black-and-white and colour exist in a dynamic relationship, sometimes flowing into each other, sometimes impacting against each other. This protean relationship is augmented by the fact that *Solaris* also includes blue and yellow toned images.¹⁸ In a sense, the film does not alternate between black-and-white and colour. Instead, it drifts through a range of chromatic alternatives: colour scenes filled with saturated colour (for example, in the yellow landing bay), colour scenes void of saturated colour (for example, in the white corridors of the space station), colour scenes with small fragments of saturated colour (for example, in Kelvin's bedroom), pure black-and-white scenes (for example again, in Kelvin's bedroom), and colour toned scenes (for example once again, in Kelvin's bedroom).^{19 20}

Conclusion

Clearly, Tarkovsky's repeated transitions between monochrome and colour are not the work of an artist stuck in a rut, unable to let go of an obsolete format. Rather, they reflect an awareness that accepting colour does not necessitate rejecting black-and-white, and a belief that the two formats can interrelate in a manner that transcends opposition.²¹ Indeed, with hindsight, it is possible to see the chromatic ambiguities of his films as ahead of their time. In his last two films, *Nostalgia* and *The Sacrifice*, Tarkovsky takes the relationship between black-and-white and colour to a new level of intimacy. Colour, pure black-and-white, and toned black-and-white are complemented by chemically desaturated colour,

as well as production and costume design so chromatically muted that even when a shot is in full colour, it often appears monochrome. The result is an overall desaturation so extreme that the line between colour and monochrome effectively dissolves. Tarkovsky's last two films can almost be regarded as simultaneously colour and monochrome. Yet in his attempts to straddle cinema's chromatic schism, Tarkovsky was held back by the technological limitations of having to colour grade chemically. The range of chromatic variations achievable through laboratory processing is relatively limited. On occasion, Tarkovsky attempted to achieve an effect that simply could not be achieved. For example, in *The Sacrifice*, the level of saturation occasionally changes *within* shots rather than between shots. The idea that colour can be a dynamic presence from moment to moment is a startling one, but the actual effect in the film is slightly clumsy – it looks like a fumbled reel change.

It was only in the 1990s, with the rise of digital post-production, that the chromatic blending that Tarkovsky aspired towards became possible. In the digital post-production suite, there are no longer distinct chromatic formats – there are only pixels. The colour values of a shot can be changed with a few clicks of a mouse. Any pixel can be given any combination of hue, saturation, and brightness. As a result, black-and-white and colour shots now routinely mix in everything from pop promos to daytime quiz shows. Desaturation has become so common as to be a cliché; one need only think of the steel greys of contemporary car advertisements. So too, as evidenced so spectacularly in *Sin City* (Robert Rodriguez & Frank Miller, 2005), individual shots can be partially saturated, desaturated, and / or resaturated. The final contradiction that I draw attention to in this essay is this: by looking backwards to a period of cinema before colour dominated black-and-white, Tarkovsky was also looking forward to a period in which black-and-white and colour were at last able to transcend their conventional opposition.

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¹ For details of Goskino's constituent departments, see Golovskoy 1986: 7-17.

² Tarkovsky's appeal to economics was also slightly naive. *Mirror*'s stubbornly apolitical introspection had been condemned as reactionary from almost all directions – the Party hierarchy, film critics, regional distributors, even other artists (Tarkovsky 1986: 8-9). So the fact that Tarkovsky's international profile was a bankable asset was irrelevant. No apparatchik could afford to champion a work that had been so vilified.

³ There were five categories: highest, first, second, third, and fourth (Golovskoy 1986: 47).

⁴ [Only for thesis] It is another typically Soviet irony that while many art cinema directors working in capitalist industries struggled to hold on to black-and-white, the struggle in the Soviet Union should be faced by those directors wishing to move to colour.

⁵ The shortfall in colour stock is confirmed by Mikhail Romadin, *Solaris*'s Art Director, in a recent DVD interview (*Solaris* Special Edition DVD, The Criterion Collection, 2002).

⁶ Though Tarkovsky's mixture of colour and black-and-white was unusual, it was not unique. Examples of contemporaneous Soviet films that mixed the two formats – presumably also for reasons influenced by supply-side economics – include *Dyadya Vanya* (Andrei Konchalovsky, 1970), *The Dawns here are Quiet* (Stanislav Rostotsky, 1972), and *Only Old Men are Going to Battle* (Leonid Bykov, 1973).

⁷ For a list of the scenes that remained to be shot, see Tarkovsky 1994: 42.

⁸ The small discrepancy between these statistics can be explained by the fact that no production goes entirely according to plan. It is inconceivable that there were not occasional divergences from Tarkovsky's anticipated 3:1 / 4:1 shooting ratios. It is also inconceivable that decisions made during the editing process did not also influence the film's final ratio of colour to black-and-white.

⁹ (Only for chapter). Add the cross-reference.

¹⁰ (Only for chapter). Editor Lyudmila Feiginova suggests that the imported negative was outdated.¹⁰ Sound designer Vladimir Sharun elaborates Feiginova's account: he suggests that the artesian well at Mosfilm broke down for 17 days, and the negative remained unprocessed for too long. Sharun also cites Tarkovsky's private opinion. According to Tarkovsky, the new stock that had been ordered for the film 'ended up in the hands of a certain very well-known Soviet film director' (probably Sergei Bondarchuk).¹⁰ Tarkovsky believed that he was instead given a different, older stock, which was then wrongly processed by Mosfilm.

¹¹ For a collection of explanations, see Johnson & Petrie 1994: 137-140. Assorted additional accounts of the events surrounding Tarkovsky's first attempt to make *Stalker* are available on *nostalgia.com*.

¹² (Insert into main body of text at this point, though only in chapter)... Again, many details surrounding the cancellation are unclear, in particular the question of how far Tarkovsky exploited the crisis to abandon a production that had not been going well.

¹³ [It is made questionable by the Andrei Rublev. Though one might argue this use was quite conventional, the complication continues...]

¹⁴ [Mention also how this draws attention to the transition and to the context of cinema as being in transition from bw to col – so col is still a noticeable presence (especially so in Soviet Union)].

¹⁵ This quotation and this footnote can go in the 'self-conscious art' bit. For Tarkovsky, the source of truth is not documentary footage of the world as it. It is the artist. Anything that prevents the artist from communicating his vision (conventional Romantic artists are invariably male) prevents his utterance of truth. Hence the slightly perverse logic that verisimilar colour is false.

¹⁶ Excerpted from Turovskaya (1994) and translated into English by Jan Bielawski ('Lyudmila Feiginova talks to Maya Turovskaya', <http://www.acs.ucalgary.ca/~tstronds/nostalghia.com/TheTopics/Stalker/chugunova.html>. Accessed 21 April, 2006).

¹⁷ 'On the Shooting of *The Sacrifice*', <http://www.acs.ucalgary.ca/~tstronds/nostalghia.com/TheTopics/Nykqvist-Memoir.html>, a translation into English by Trond S. Trondsen of fragments of Nykvist and Forslund (1997). Accessed 21 April, 2006.

¹⁸ For thesis only: Kris and Gibarian exist in separate chromatic spaces, but then Gibarian becomes bw, so the two share a chromatic space. Adds to the sense of chromatic indeterminacy.

¹⁹ Thesis only: Kelvin's white bedroom, in which the walls are – as in the colour footage – still white and the porthole is still black

²⁰ [Thesis only: add Mirror stuff.

Tarkovsky's chromatic colour cycling is taken further in Mirror.

As in *Solaris*, *Mirror*'s mixture of black-and-white and colour includes sepia toned images (monochrome images that are neither black-and-white nor colour). [Plot – the film is about memory and dream. But the colours do not reflect this. The film invites schematisation but repels it.²⁰ Conventionally, black-and-white and colour tend to be used to signify opposed states. The use of black-and-white, sepia and colour in *Mirror* does not fulfil any such function. It does not clearly separate waking from dream, reality from art, or past from present. The film's black-and-white and sepia sections are not flashbacks, not dreams, not bursts of documentary reality – or rather, they are all of these things and so none of them in particular, because the film's colour sections are all of these things too. The film's chromatic variety leaves behind conventional connotations of black-and-white with waking, with reality and with the past and of colour with dreaming, with art, and with the present. Though numerous critics and cinephiles have tried to schematise *Mirror*'s movements between black-and-white, sepia, and colour, these movements defy thematic or narrative explanation.²⁰ Instead, the film's chromatic mixture exacerbates the film's narrative fragmentation. The chromatic bricolage, unrooted from meaning, provides a further layer of obfuscation between reality, memory, and fantasy (e.g. show two sequences which have same colour but probably aren't same state [Also a specific example of a transition or two]).

Additional note – the viewer's chromatic memory. One's experience of chromatic fluidity in *Mirror* parallels (and slightly reworks) the chromatic slippages of the film, which themselves contribute to the film's sense of mnemonic vagary. In the film, the narrator and his wife argue about a memory.

(Precisely which scenes are colour, which are toned, and which are black-and-white is of secondary importance. My economic argument above suggested that Tarkovsky used all the colour he could. This argument precludes the possibility of some hidden schema internal to the film that decided which chromatic alternative was used for which scenes.)

²¹ For thesis only: [Each of his films mixes black-and-white and colour in a slightly different way because each is an attempt to answer anew the question of how colour and black-and-white can be reconciled.]